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EXAMINER

MARTINEZ, JOSEPH P

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/828,876	Applicant(s) WATSON ET AL.	
	Examiner Joseph P. Martinez	Art Unit 2873	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-79 is/are pending in the application.
- 4a) Of the above claim(s) 60-76 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-59 and 77-79 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10-31-05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9-29-05, 9-30-05</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 6-12, 14-23, 25-34, 36-41, 44-51, 53-55, 57, 58, 77 and 79 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Anderson (5796526).

Re claim 1, Anderson teaches for example in fig. 3 and 4, a beam combiner (33), comprising: a first beam-input face (input face of 33) aligned to receive first and second beams of electromagnetic energy (from 31) respectively having a first and second wavelengths (col. 5, ln. 52-53); a beam-output face (output face of 33); a first reflector (col. 6, ln. 2-4) aligned to reflect the first received beam toward the beam-output face (col. 6, ln. 2-4); and a second reflector (col. 6, ln. 2-4) aligned to pass the first beam from the first reflector (col. 6, ln. 4-6) and to reflect the received second beam toward the beam-output face (col. 6, ln. 2-4).

Re claim 12, Anderson teaches for example in fig. 3 and 4, a beam combiner (33), comprising: a first section of transparent material (33) having a beam-input face (input of 33) and a beam-output face (output of 33); a second section of transparent material (33) having a beam input face (input of 33), a beam-directing face (col. 6, ln. 2-

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4) adjacent to the beam-output face of the first section and operable to reflect (col. 6, ln. 2-4) a second wavelength (col. 5, ln. 52-53) and to pass a first wavelength of electromagnetic radiation (col. 6, ln. 4-6), and a beam-output face (output of 33); and a third section of transparent material (33) having a beam input face (input of 33), a beam-directing face (col. 6, ln. 2-4) adjacent to the beam-output face of the second section and operable to reflect (col. 6, ln. 2-4) a third wavelength of electromagnetic radiation (col. 5, ln. 52-53) and to pass the first and second wavelengths (col. 6, ln. 4-6), and a beam output face (output of 33).

Re claim 23, Anderson teaches for example in fig. 3 and 4, a beam combiner (33), comprising; a first section of transparent material (33) having a beam-input face (input of 33) and having a first beam-directing face (col. 6, ln. 2-4) operable to reflect (col. 6, ln. 2-4) a second wavelength (col. 5, ln. 52-53) and to pass (col. 6, ln. 4-6) a first wavelength (col. 5, ln. 52-53) of electromagnetic radiation; a second section of transparent material (33) having a beam-input face (input of 33), a beam-receiving face (col. 3, ln. 59-62, wherein the office interprets the face receiving the beam from the previous light source to teach the claimed limitation) adjacent to the first beam-directing face of the first section, and a beam-directing face (col. 6, ln. 2-4) operable to reflect (col. 6, ln. 2-4) a third wavelength of electromagnetic radiation (col. 5, ln. 52-53) and to pass (col. 6, ln. 4-6) the first and second wavelengths; and a third section of transparent material (33) having a beam-input face (input of 33), a beam-receiving face (col. 3, ln. 59-62, wherein the office interprets the face receiving the beam from the previous light

source to teach the claimed limitation) adjacent to the beam-directing face of the second section, and a beam-output face (output of 33).

Re claim 34, Anderson teaches for example in fig. 3 and 4, an image-beam generator, comprising: a beam source (31) operable to generate the first, second, and third beams of light respectively having first, second, and third wavelengths (col. 5, ln. 52-53); and a beam combiner (33), including, a beam-input face (input of 33) aligned to receive the first, second, and third beams, a beam output face (output of 33) aligned to emanate an image beam that includes the first, second, and third beams (col. 6, ln. 7-10), a first reflector aligned to reflect the first received beam toward the beam-output face (col. 6, ln. 2-4), a second reflector (col. 6, ln. 2-4) aligned to pass the first beam from the first reflector (col. 6, ln. 4-6) and to reflect the received second beam toward the beam-output face (col. 6, ln. 2-4) in alignment with the first beam (col. 6, ln. 7-10), and a third reflector (col. 6, ln. 2-4) aligned to pass the first and second beams from the first and second reflectors (col. 6, ln. 4-6) and to reflect the received third beam toward the beam-output face (col. 6, ln. 2-4) in alignment with the first and second beams (col. 6, ln. 7-10).

Re claim 41, Anderson teaches for example in fig. 3 and 4, an image-beam generator, comprising: a beam source (31) operable to generate the first, second, and third beams of light respectively having first, second, and third wavelengths (col. 5, ln. 52-53); and a beam combiner (33), including, a first beam-input face (input of 33)

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aligned to receive the first beam; a second beam-input face (input of 33) aligned to receive the second and third beams, a beam output face (output of 33) aligned to emanate an image beam that includes the first, second, and third beams (col. 6, ln. 7-10), a first reflector (col. 6, ln. 2-4) aligned to pass the first beam from the first beam-input face (col. 6, ln. 4-6) and to reflect the received second beam (col. 6, ln. 2-4) toward the beam-output face in alignment with the first beam (col. 6, ln. 7-10), and a second reflector (col. 6, ln. 2-4) aligned to pass the first and second beams from the second reflector (col. 6, ln. 4-6) and to reflect the received third beam toward the beam-output face (col. 6, ln. 2-4) in alignment with the first and second beams (col. 6, ln. 7-10).

Re claim 45, Anderson teaches for example in fig. 3 and 4, an image generator, comprising: a beam source (31) operable to generate the first, second, and third beams of light respectively having first, second, and third wavelengths (col. 5, ln. 52-53); a beam combiner (33), including, a beam-input face (input of 33) aligned to receive the first, second, and third beams, a beam output face (output of 33) aligned to emanate an image beam that includes the first, second, and third beams (col. 6, ln. 7-10), a first reflector (col. 6, ln. 2-4) aligned to reflect the first received beam toward the beam-output face (col. 6, ln. 2-4), a second reflector (col. 6, ln. 2-4) aligned to pass the first beam from the first reflector (col. 6, ln. 4-6) and to reflect the received second beam toward the beam-output face (col. 6, ln. 2-4) in alignment with the first beam (col. 6, ln. 7-10), and a third reflector (col. 6, ln. 2-4) aligned to pass the first and second beams

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from the first and second reflectors (col. 6, ln. 4-6) and to reflect the received third beam toward the beam-output face (col. 6, ln. 2-4) in alignment with the first and second beams (col. 6, ln. 7-10); and a scanner (36) operable to generate an image with the image beam (col. 6, ln. 24-25).

Re claim 49, Anderson teaches for example in fig. 3 and 4, an image generator, comprising: a beam source (31) operable to generate the first, second, and third beams of light respectively having first, second, and third wavelengths (col. 5, ln. 52-53); a beam combiner (33), including, a first beam-input face (input of 33) aligned to receive the first beam; a second beam-input face (input of 33) aligned to receive the second and third beams, a beam output face (output of 33) aligned to emanate an image beam that includes the first, second, and third beams (col. 6, ln. 7-10), a first reflector (col. 6, ln. 2-4) aligned to pass the first beam from the first beam-input face (col. 6, ln. 4-6) and to reflect the received second beam toward the beam-output face (col. 6, ln. 2-4) in alignment with the first beam (col. 6, ln. 7-10), and a second reflector (col. 6, ln. 2-4) aligned to pass the first and second beams from the second reflector (col. 6, ln. 4-6) and to reflect the received third beam toward the beam-output face (col. 6, ln. 2-4) in alignment with the first and second beams (col. 6, ln. 7-10); and a scanner (36) operable to generate an image with the image beam (col. 6, ln. 24-25).

Re claim 50, Anderson teaches for example in fig. 3 and 4, a method, comprising: directing a first beam of electromagnetic energy (from 31) having a first

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wavelength (col. 5, ln. 52-53) through a first reflector (col. 6, ln. 2-4) with a second reflector (col. 6, ln. 2-4); and directing a second beam of electromagnetic energy (from 31) having a second wavelength (col. 5, ln. 52-53) with the first reflector wherein the first beam is substantially aligned with the second beam (col. 6, ln. 7-10).

Re claim 55, Anderson teaches for example in fig. 3 and 4, a method, comprising: generating first, second, and third beams of light (from 31) respectively having first, second, and third wavelengths (col. 5, ln. 52-53); directing the first beam through first and second reflectors (col. 6, ln. 4-6); directing the second beam through the second reflector with the first reflector (col. 6, ln. 4-6) wherein the directed second beam substantially coincides with the directed first beam (col. 6, ln. 7-10); and directing the third beam with the second reflector (col. 6, ln. 4-6) wherein the directed third beam substantially coincides with the directed first and second beams (col. 6, ln. 7-10).

Re claim 77, Anderson (5796526) teaches for example in fig. 3 and 4, a beam combiner, comprising: a first section of transparent material (33) having a beam-input face and a beam-output face (input and output of 33); a second section of transparent material (33) having a beam-input face (input of 33), a beam directing face adjacent to the beam-output face of the first section and operable to reflect a second wavelength and to pass a first wavelength of electromagnetic radiation (fig. 3 and 4), and a beam-output face (output of 33); and a third section of transparent material (33) having a beam-input face (input of 33), a beam directing face adjacent to the beam-output face of



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the second section and operable to reflect a third wavelength of electromagnetic radiation smaller than the first wavelength and to pass the first and second wavelengths (fig. 3 and 4), and a beam-output face (output of 33).

Re claim 79, Anderson (5796526) teaches for example in fig. 3 and 4, a beam combiner, comprising: a substantially-square beam-input face aligned (input of 33, wherein the office interprets the office interprets the input of the second 33 in fig. 3 to be *substantially* square) to receive first and second beams of electromagnetic energy respectively having a first and second wavelengths (col. 5, ln. 52-53); a beam-output face (output of 33) a first reflector aligned to reflect the first received beam toward the beam-output face (col. 6, ln. 4-6); and a second reflector aligned to pass the first beam from the first reflector and to reflect the received second beam toward the beam-output face (col. 6, ln. 4-6).

Re claim 2, Anderson further teaches for example in fig. 3 and 4, wherein the first beam-input face (input of 33) is aligned to receive a third beam of electromagnetic energy (from 31) having a third wavelength (col. 5, ln. 52-53); a third reflector (col. 6, ln. 2-4) aligned to reflect the received third beam toward the beam-output face (output of 33); and wherein the first and second reflectors are aligned to pass the third beam from the third reflector (col. 6, ln. 4-6).

Re claim 4, Anderson further teaches for example in fig. 3 and 4, a second beam-input face (input of 33) aligned to receive a third beam of electromagnetic energy (from 31) having a third wavelength (col. 5, ln. 52-53) and directed toward the beam-output face (output of 33); and wherein the first and second reflectors are aligned to pass the third beam from the second beam-input face (col. 6, ln. 4-6).

Re claim 6, Anderson further teaches for example in fig. 3 and 4, the first reflector is substantially planar; and the second reflector is substantially planar and is substantially parallel to the first reflector (wherein the office interprets the reflective surfaces of 33 to be planar and parallel).

Re claim 7, Anderson further teaches for example in fig. 3 and 4, the first beam-input face is substantially planar; and the second reflector is substantially planar (wherein the office interprets the faces of 33 to be planar) and intersects the beam-input face at an acute angle (wherein the office interprets the sections of 33 to be a parallelogram and therefore the angle between the input face and the reflective surface is an acute angle, as claimed).

Re claim 8, Anderson further teaches for example in fig. 3 and 4, the beam-output face is substantially planar (wherein the office interprets the output of 33 to be planar); and the second reflector is substantially planar and intersects the beam-output face at an acute angle (wherein the office interprets the sections of 33 to be a

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parallelogram and therefore the angle between the output face and the reflective surface is an acute angle, as claimed).

Re claim 9, Anderson further teaches for example in fig. 3 and 4, the first beam-input face (input of 33) is aligned to receive a third beam of electromagnetic energy (from 31) having a third wavelength (col. 5, ln. 52-53); a third reflector aligned to reflect the received third beam toward the beam-output face (col. 6, ln. 2-4); wherein the third beam is operable to propagate from the first beam-input face (col. 6, ln. 4-6), through first regions of the first and second reflectors (col. 6, ln. 4-6), to the third reflector, and through second regions of the first and second reflectors (col. 6, ln. 4-6); and wherein the first beam is operable to propagate from the first beam-input face (input of 33), through a first region of the second reflector (col. 6, ln. 4-6), to the first reflector, and through a second region of the second reflector (col. 6, ln. 4-6).

Re claim 10, Anderson further teaches for example in fig. 3 and 4, the first beam-input face (input of 33) comprises a first segment face aligned to receive the first beam of electromagnetic energy (from 31) and a second segment face (input of 33) aligned to receive the second beam of electromagnetic energy (from 31), the second segment face being noncoplanar with the first segment face (col. 5, ln. 60-63).

Re claim 11, Anderson further teaches for example in fig. 3 and 4, the first beam-input face (input of 33) comprises a first segment face aligned to receive the first beam

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of electromagnetic energy (from 31) and a second segment face (input of 33) aligned to receive the second beam of electromagnetic energy (from 31), the second segment face being substantially coplanar with the first segment face (col. 5, ln. 60-63).

Re claim 14, Anderson further teaches for example in fig. 3 and 4, the first section comprises a beam-directing face operable to reflect (col. 6, ln. 2-4) the first wavelength of electromagnetic radiation (from 31).

Re claim 15, Anderson further teaches for example in fig. 3 and 4, the beam-input face (input of 33) and the beam-output face (output of 33) of the first section intersect at an acute angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations); the beam-input face (input of 33) and the beam-output face (output of 33) of the second section intersect at an obtuse angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations); and the beam-input face and the beam-output face of the third section intersect at a substantially right angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations).

Re claim 16, Anderson further teaches for example in fig. 3 and 4, the beam-input face (input of 33) and the beam-output face (output of 33) of the first section intersect at an obtuse angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations); the beam-input face (input of 33) and the beam-output face (output of 33) of the second section intersect at an obtuse angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations); and the beam-input face and the beam-output face of the third section intersect at a substantially right angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations).

Re claim 17, Anderson further teaches for example in fig. 3 and 4, the beam-input face and the beam-directing face of the second section intersect at an acute angle; and the beam-input face and the beam-directing face of the third section intersect at an acute angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations).

Re claim 18, Anderson further teaches for example in fig. 3 and 4, the first section comprises a beam-directing face operable to reflect the first wavelength of

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electromagnetic radiation; the beam-input face and the beam-directing face of the first section intersect at an acute angle; the beam-input face and the beam-directing face of the second section intersect at an acute angle; and the beam-input face and the beam-directing face of the third section intersect at an acute angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations).

Re claim 19, Anderson further teaches for example in fig. 3 and 4, the beam-directing face and the beam-output face of the second section are substantially parallel; and the beam-directing face and the beam-output face of the third section intersect at an acute angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations).

Re claim 20, Anderson further teaches for example in fig. 3 and 4, the first section comprises a beam-directing face (col. 6, ln. 2-4) aligned to reflect the first wavelength of electromagnetic radiation (from 31); the beam-directing face and the beam-output face of the first section are substantially parallel; the beam-directing face and the beam-output face of the second section are substantially parallel; and the beam-directing face and the beam-output face of the third section intersect at an acute angle (wherein the office interprets the combiner 33 to provide a parallelogram sections

with a right angle prism at the front and back side, and therefore teach the claimed limitations).

Re claims 21 and 32, supra claims 12 and 23, respectively. Furthermore, Anderson further teaches for example in fig. 3 and 4, the height of the beam-output face of the third section is substantially equal to the lengths of the beam-input faces of the first, second, and third sections (wherein the office interprets fig. 3 and 4 to teach the claimed limitation).

Re claims 22 and 33, supra claims 12 and 23, respectively. Furthermore, Anderson further teaches for example in fig. 3 and 4, the beam input faces (input of 33) of the second and third sections of transparent material are substantially coplanar (fig. 3).

Re claim 25, Anderson further teaches for example in fig. 3 and 4, first section comprises a second beam-directing face (col. 6, ln. 2-4) operable to reflect the first wavelength of electromagnetic radiation toward the first beam-directing face (col. 6, ln. 2-4).

Re claim 26, Anderson further teaches for example in fig. 3 and 4, the beam-input face and the first beam-directing face of the first section intersect at an acute angle; the beam-input face and the beam-directing face of the second section intersect

at an obtuse angle; and the beam-input face and the beam-output face of the third section intersect at a substantially right angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations).

Re claim 27, Anderson further teaches for example in fig. 3 and 4, the beam-input face and the first beam-directing face of the first section intersect at an obtuse angle; the beam-input face and the beam-directing face of the second section intersect at an obtuse angle; and the beam-input face and the beam-output face of the third section intersect at a substantially right angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations).

Re claim 28, Anderson further teaches for example in fig. 3 and 4, the beam-input face and the beam-receiving face of the second section intersect at an acute angle; and the beam-input face and the beam-receiving face of the third section intersect at an acute angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations).

Re claim 29, Anderson further teaches for example in fig. 3 and 4, the first section comprises a second beam-directing face (col. 6, ln. 2-4) operable to reflect the



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first wavelength of electromagnetic radiation (from 31); the beam-input face (input of 33) and the first beam-directing face (col. 6, ln. 2-4) of the first section intersect at an obtuse angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations); the beam-input face (input of 33) and the second beam-directing face (col. 6, ln. 2-4) of the first section intersect at an acute angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations); the beam-input face (input of 33) and the beam-directing face (col. 6, ln. 2-4) of the second section intersect at an obtuse angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations); the beam-input face (input of 33) and the beam-receiving face (col. 6, ln. 2-4) of the second section intersect at an acute angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations); and the beam-input face (input of 33) and the beam-receiving face (col. 6, ln. 2-4) of the third section intersect at an acute angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations).

Re claim 30, Anderson further teaches for example in fig. 3 and 4, the beam-receiving face and the beam-directing face of the second section are substantially

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parallel; and the beam-receiving face and the beam-output face of the third section intersect at an acute angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations).

Re claim 31, Anderson further teaches for example in fig. 3 and 4, the first section comprises a second beam-directing face aligned to reflect the first wavelength of electromagnetic radiation; the first and second beam-directing faces are substantially parallel; the beam-receiving face and the beam-directing face of the second section are substantially parallel; and the beam-receiving face and the beam-output face of the third section intersect at an acute angle (wherein the office interprets the combiner 33 to provide a parallelogram sections with a right angle prism at the front and back side, and therefore teach the claimed limitations).

Re claims 36 and 44, supra claims 34 and 41, respectively. Furthermore, Anderson further teaches for example in fig. 3 and 4, the first, second, and third beams traverse respective paths from the beam source to the beam-output face of the beam combiner (col. 6, ln. 7-10), the paths having substantially the same optical length (wherein the office interprets the paths to substantially have the same optical lengths).

Re claim 37, Anderson further teaches for example in fig. 3 and 4, the beam-output face (output of 33) is aligned to emanate a composite beam that includes the

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first, second, and third beams (col. 6, ln. 7-10); and an optical train aligned after the beam-output face to generate the image beam from the composite beam (35, 37, 38).

Re claim 38, Anderson further teaches for example in fig. 3 and 4, the beam source comprises first, second, and third beam generators (31) respectively operable to generate the first, second, and third beams (col. 5, ln. 52-53).

Re claim 39, Anderson further teaches for example in fig. 3 and 4, the beam-input face comprises first, second, and third substantially coplanar segment faces (input of 33) aligned to respectively receive the first, second, and third beams (col. 5, ln. 59-62).

Re claim 40, Anderson further teaches for example in fig. 3 and 4, the beam-input face comprises first, second, and third segment faces (input of 33) aligned to respectively receive the first, second, and third beams, one of the segment faces being noncoplanar with another one of the segment faces (col. 5, ln. 65-67).

Re claim 46, Anderson further teaches for example in fig. 3 and 4, the scanner comprises a mirror (36) operable to generate the image by sweeping the image beam across a display region (col. 5, ln. 23-28).

Re claim 47, Anderson further teaches for example in fig. 3 and 4, the scanner comprises a microelectromechanical scanner (36).

Re claim 48, Anderson further teaches for example in fig. 3 and 4, the scanner is operable to generate the image on a display screen (col. 5, ln. 23-28).

Re claim 51, Anderson further teaches for example in fig. 3 and 4, directing a third beam of electromagnetic energy (from 31) having a third wavelength (col. 5, ln. 52-53) through the first and second reflectors (col. 6, ln. 4-6) such that the third beam is substantially aligned with the first and second beams (col. 6, ln. 7-10).

Re claim 53, Anderson further teaches for example in fig. 3 and 4, the first beam comprises reflecting the first beam through the first reflector with a second reflector (fig. 3, col. 3, ln. 57-62, wherein the office interprets the light to split and a portion to pass through 33 which is then reflected towards the output by the next reflective surface and a portion to be reflected towards the output).

Re claim 54, Anderson further teaches for example in fig. 3 and 4, directing the first beam comprises: directing the first beam through the first reflector (fig. 3, col. 3, ln. 57-62, wherein the office interprets the light to split and a portion to pass through 33 which is then reflected towards the output by the next reflective surface and a portion to be reflected towards the output); and reflecting the first beam back through the first

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reflector with a second reflector (fig. 3, col. 3, ln. 57-62, wherein the office interprets the light to split and a portion to pass through 33 which is then reflected towards the output by the next reflective surface and a portion to be reflected towards the output).

Re claim 57, Anderson further teaches for example in fig. 3 and 4, directing the first beam comprises causing the first beam to traverse a first optical path having a length; directing the second beam comprises causing the second beam to traverse a second optical path having the same length; and directing the third beam comprises causing the third beam to traverse a third optical path having the same length (fig. 3, wherein the office interprets the path lengths from source through each respective section is equal).

Re claim 58, Anderson further teaches for example in fig. 3 and 4, scanning the substantially coinciding first, second, and third beams (col. 6, ln. 7-10) to generate an image on a display (col. 5, ln. 23-28).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 5, 13, 24, 35, 42, 43, 52, 56, 59 and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (5796526).

Re claim 78, Anderson (5796526) teaches for example in fig. 3 and 4, a beam combiner, comprising: a first section of transparent material (33) having a beam-input face (input of 33) and a beam-output face (output of 33); a second section of transparent material (33) having a beam-input face (input of 33), a beam directing face adjacent to the beam-output face of the first section and operable to reflect a second wavelength and to pass a first wavelength of electromagnetic radiation (col. 6, ln. 4-6), and a beam-output face (output of 33); and a third section of transparent material (33) having a beam-input face (input of 33), a beam directing face adjacent to the beam-output face of the second section and operable to reflect a third wavelength of electromagnetic radiation and to pass the first and second wavelengths (col. 6, ln. 4-6), and a beam-output face (output of 33).

But, Anderson fails to explicitly teach the third wavelength of electromagnetic radiation is larger than the first wavelength.

However, Anderson teaches for example that the light sources can be differently colored (col. 5, ln. 52-53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Anderson et al. with a third wavelength of electromagnetic radiation being larger than the first wavelength in order to provide different colors for a display.

Re claims 3 and 5, supra claim 1. Furthermore, Anderson further teaches for example in fig. 3 and 4, wherein the first and second beams respectively comprise light of different color (col. 5, ln. 52-53); wherein the first beam-input face (input of 33) is aligned to receive a third beam of colored light (col. 5, ln. 52-53); a third reflector (col. 6, ln. 2-4) aligned to reflect the received third beam toward the beam-output face (col. 6, ln. 2-4); and wherein the first and second reflectors are aligned to pass the third beam from the third reflector (col. 6, ln. 4-6).

But, Anderson fails to explicitly teach the colors of light are red, green and blue.

However, Anderson teaches for example, each of the light sources could be a different color (col. 5, ln. 52-53), wherein the office interprets the teachings to include red, green and blue, as claimed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Anderson to include red, green and blue lights to provide an image with said colors.

Re claims 13, 24, 35, 42, 43, 52 and 56, supra claims 12, 23, 34, 41, 50 and 55, respectively. Furthermore, Anderson further teaches for example in fig. 3 and 4, using lights of different color (col. 5, ln. 52-53) and further that the beams are components of an image or pixel (col. 5, ln. 50-56).

But, Anderson fails to explicitly teach the colors of light are red, green and blue.

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However, Anderson teaches for example, each of the light sources could be a different color (col. 5, ln. 52-53), wherein the office interprets the teachings to include red, green and blue, as claimed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Anderson to include red, green and blue lights to provide an image with said colors.

Re claim 59, supra claim 55. Furthermore, Anderson further teaches for example, coinciding first, second and third beams (col. 6, ln. 7-10) and projecting the image onto a display screen (col. 5, ln. 23-28).

But, Anderson fails to explicitly teach projecting the image into an eye to generate an image onto the retina.

However, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Anderson to project the image into an eye in order to provide a head up display.



### ***Response to Arguments***

Applicant's arguments filed 10-31-05 have been fully considered but they are not persuasive.

Re applicant's arguments on p. 20-22, wherein the applicant argues that the prior art does not disclose a first face to receive first and second beams of beams, have been considered, but are not persuasive. The office interprets Anderson (5796526), more specifically fig. 3 of Anderson, to teach the first face of 33 (input of 33) to receive first and second beams.

Re applicant's arguments on p. 22-23, wherein the applicant argues that the prior art does not disclose "differently-colored" beams can only be interpreted as beams of no more than two different colors (wavelengths), have been considered, but are not persuasive. The office can find no substantiation for interpreting "differently-colored" beams to be limited to only two different colors, and therefore interprets the Anderson (5796526) to teach that each of the light sources can be a different color (col. 5, ln. 52-56).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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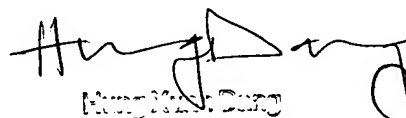
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph P. Martinez whose telephone number is 571-272-2335. The examiner can normally be reached on M-F 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM  
2-20-06



Joseph P. Martinez  
Patent Examiner